

CLAIMS

1. A method for detecting a canine CYP1A2 genetic polymorphism, characterized by determining a base corresponding to a base at position 1117 of a canine CYP1A2 gene (at position 1179 of the nucleotide sequence of SEQ ID NO: 22).
2. A method for determining which dog is an extensive metabolizer or a poor metabolizer in the rate of drug metabolism, said method comprising:
preparing a nucleic acid sample from a dog, and
determining a base corresponding to a base at position 1117 of a canine CYP1A2 gene (at position 1179 of the nucleotide sequence of SEQ ID NO: 22).
3. A method for selecting a dog used in a medicament test, comprising determining which dog is an extensive metabolizer or a poor metabolizer in the rate of drug metabolism by the method according to claim 2.
4. A method for assaying a pharmacological effect and/or toxicity of a test drug, comprising administering a test drug to an extensive metabolizer group or a poor metabolizer group selected by the method according to claim 3.
5. A single stranded DNA consisting of 15 to 30 nucleotides, which hybridizes to a sense strand or an antisense strand of a canine CYP1A2 gene having the nucleotide sequence of SEQ ID NO: 1 or the nucleotide sequence consisting of nucleotides 63-1601 of SEQ ID NO: 22, or a genetic polymorphism thereof under stringent conditions, and selected from the group consisting of:
 - (1) a single stranded DNA consisting of 15 to 30 nucleotides, wherein a base corresponding to a base at position 405 of the nucleotide sequence of SEQ ID NO: 1 or at position 1179 of the nucleotide sequence of SEQ ID NO: 22 is contained, and the corresponding base is C;
 - (2) a single stranded DNA consisting of 15 to 30 nucleotides, wherein a base corresponding to a base at position 405 of the

nucleotide sequence of SEQ ID NO: 1 or at position 1179 of the nucleotide sequence of SEQ ID NO: 22 is contained, and the corresponding base is T; and

(3) a single stranded DNA consisting of 15 to 30 nucleotides, which is a strand complementary to the single stranded DNA (1) or (2).

6. The single stranded DNA according to claim 5, consisting of the nucleotide sequence of SEQ ID NO: 14 or 16.

7. An agent for diagnosing a polymorphism in metabolic activity of a drug which is a substrate specific to canine CYP1A2, said agent comprising as an active ingredient a reagent for detecting a base corresponding to a base at position 1117 of a canine CYP1A2 gene (at position 1179 of the nucleotide sequence of SEQ ID NO: 22).